

NYINGA TYE
BEATRICE

ALUR WOMEN CUSTODIANS OF THE LANDS AND THE WATERS

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Nyinga tye Beatrice,^{*} an Alur fisherwoman of the M'vouta-N'zighé¹

*

Beatrice is a collective noun born to bring together the voices and struggle of the Alur fisherwomen's body-territory of the Dei village landing sites (Uganda-Democratic Republic of the Congo border).

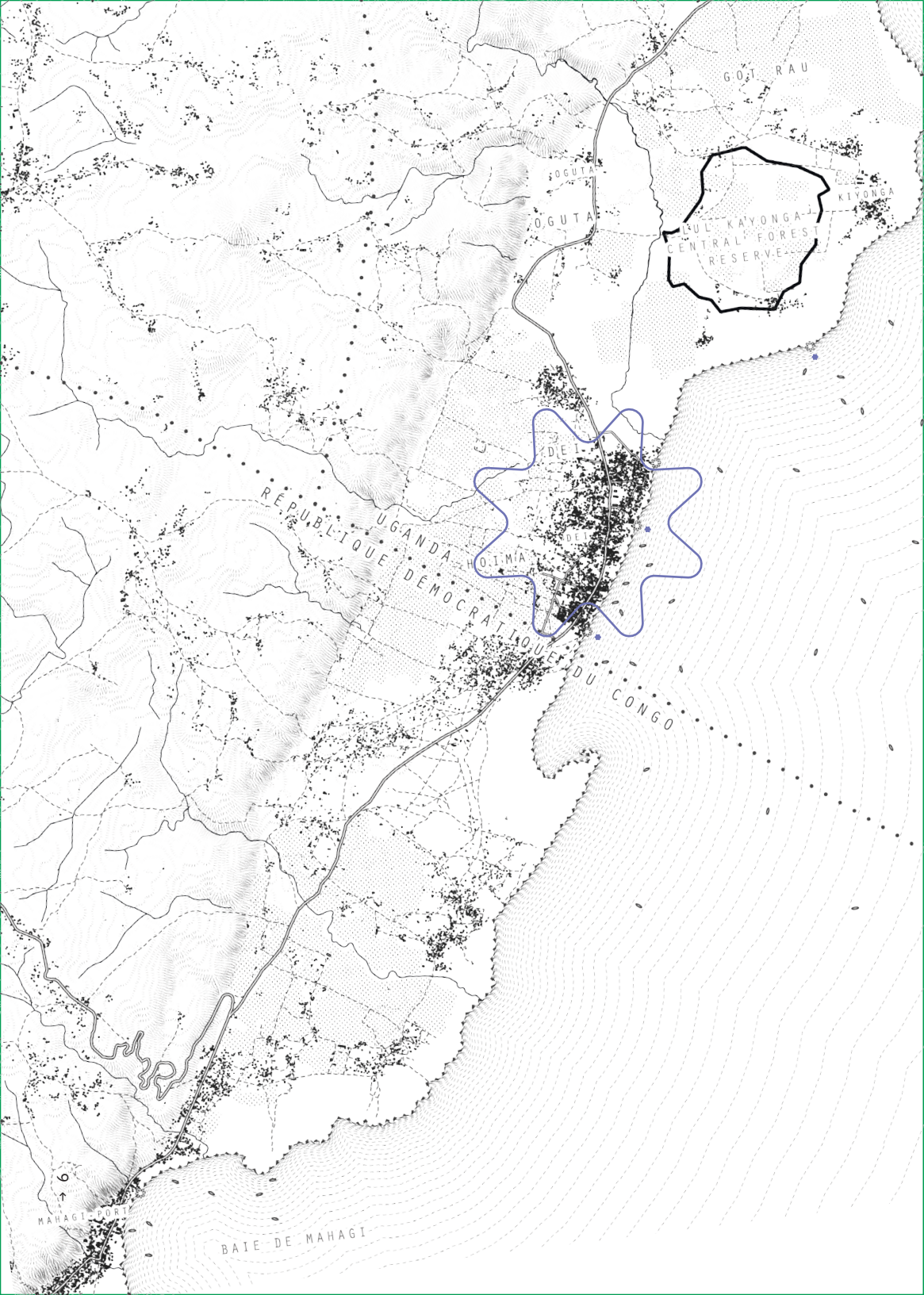
*The publication **Nyinga tye Beatrice (our name is Beatrice)** is a participatory written piece, based on communal empirical observation, grounded in dialogue, reciprocity and unromanticised self-representation.*

1 ↓

We call the Albert lake by the name of M'vouta-N'zighé (Wutan-Zigé) as spoken in the Alur language and the dialect of the lower lands, the Jonam. The north-western shore of the lake is our ancestral land, since we anciently migrated with other Luo groups from the confluence of the Nile River and from Bahr-el-Ghazel (today Sudan), our homeland, to settle in this area.







Many of us fish Muziri, Onangnang, Angara and Ngasia. I do it for subsistence of my household, while the extra I sell at the landing site ²

MUZIRI

(MUKENE)

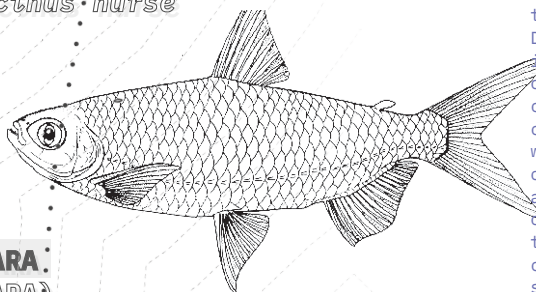
Rastrineobola argentea



ONANGNANG

(NANG NANG, RAGOI)

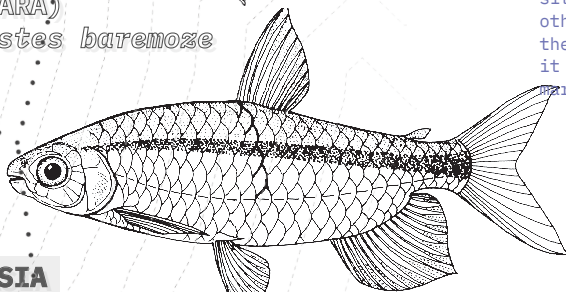
Brycinus nurse



ANGARA

(NGARA)

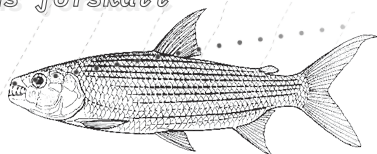
Alestes baremoze



NGASIA

(NGASSA)

Hydrocynus forskali



² !

The landing site is mostly run by fish traders. They own or rent a boat from a "chief" and hire a group of 3-4 fisher people to go fishing for him/her. They then sell the catch directly to consumers at the landing site, sell it wholesale to those who take it out of Dei's village, or have it processed, sun-dried or smoked, and then carry it to local sub-county markets. Those who have their own canoe or boat try to organise a fishing trip for their own consumption, selling the surplus directly to consumers at the landing site, or they join with other women to process the fish and preserve it or sell it to the markets.

You can spot me coming back from a fishing trip onboard any of the 80 between canoes and boats at Dei's landing sites.³ In 2020 there were 690. Fishing becomes increasingly difficult :⁴

- * *Water Piracy;*
- * *Decline of aquatic fauna and diversity due to the use of prohibited fishing rears or illegal fishing methods;*
- * *Waterborne diseases and over-reproduction of the water hyacinth;*
- * *A strict new fisheries and aquaculture act preventing subsistence fisher people from complying with requirements;*
- * *High repair costs for boats and canoes due to cracks resulting from strong winds;*
- * *Increased equipment prices and theft amongst fisher people themselves;*
- * *Militarisation and misuse of power by the fisheries protection unit and fish patrol units;*
- * *Disregard for the customary norm that fishing trips are not allowed when the moon is out.*

3 ↓

Price fluctuations at the market, the unaffordability of the equipment required by the regulations introduced in 2021 and police persecution have reduced us to starvation due to the inability to put boats in the water at Dei landing sites. A little further north, at Kavango landing site, you won't find a single boat; just a couple of people hooping Tilapia with nets.

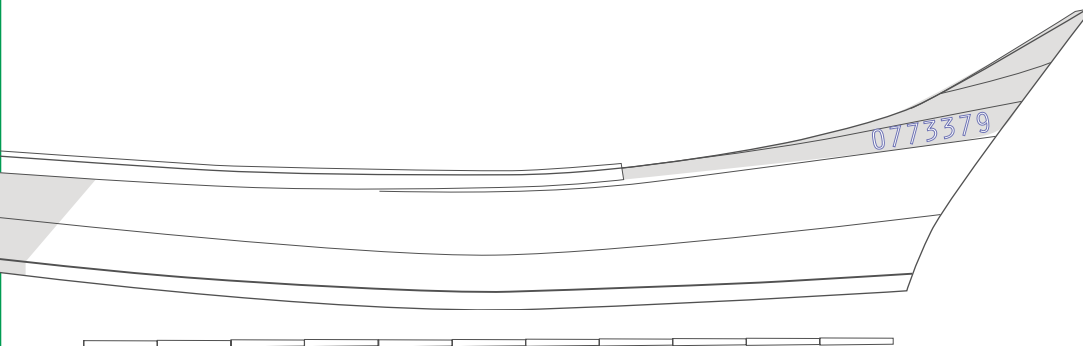
4 ↓

We are suffering the action of water pirates, perhaps from the Congolese side, who confiscate boats and abduct fisherfolk for ransom. And bilateral meetings fail to come up with solutions while leaders are not consulted. The Fish Patrol Units and UPDF, instead of countering these criminal dynamics, are militarising the Ugandan fishing sector and criminalising fisherfolk, due to the regulations introduced by the Fisheries and Aquaculture Act of 2022, to which fisherfolk are unable to comply in the short term.

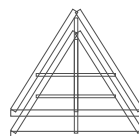
The biggest problem is the replacement of the majority of the equipment, starting from the minimum length of the boats (8 meters), to the fishing net size and their material, not to mention the increased fuel costs for those who navigate by motor, the increased cost of boat maintenance (strong winds on the lake crack them easily) and equipment theft. The risk of having one's boat set on fire on the suspicion of wrongdoing is extremely high. On August 19, 2021, many of us lost all our equipment, burned by the military in a large



Our traditional boats, canoes and equipment are mostly outlawed.⁵ To comply with new government regulations, a fishing trip can cost up to the unattainable amount of UGX 7,700,000 (USD 2,000) per individual



↑ Traditional boat at Dei landing site



5 |

public demonstration. And above all, the lake has changed. More and more waterborne diseases are emerging, while generally the aquatic fauna is declining in the area in front of the landing site. Chemical contaminants, never before found, are polluting the water; they are the noxious substances and acids that some fisherfolk use to fish. We are also worried about possible oil spills eventually caused by oil exploitation projects on the shore opposite Dei, Buliisa district.

The Fisheries and Aquaculture Act, 2022 has completely transformed the lives of us fisherfolk. A lot of regulations were imposed out of the blue without giving any time to prepare ourselves. Our traditional canoes or boats are less than 8 metres long, the minimum length allowed. Legal fishing nets are difficult to get and too expensive (encouraging recourse to illegal rearing fishing or illegal fishing methods). We report that the Government of Uganda is currently enforcing compliance through seizure of boats and/or nets and that the seized

items are routinely burnt by the law enforcement personnel. However, a review of the provisions of the law, sections 101 and 102 shows no provision in the Bill that gives the enforcement officers power to destroy and/or burn boats and nets once a suspect is arrested. The police seize or destroy the equipment of suspects abusing their power to the point of extrajudicial detention.

OVERVIEW OF COSTS FOR BOAT BUILDING

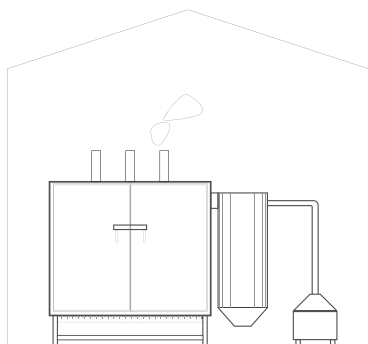
Timber	30 pieces	UGX 210,000
Frames	25 pieces	UGX 300,000
Colors for painting the boat	4 tins	UGX 220,000
Blankets to close gaps between timbers	6 pieces	UGX 60,000
Pay Labour for the carpenter	1 person	UGX 500,000

OVERVIEW OF COSTS PER FISHER PERSON FOR A SINGLE FISHING TRIP WITH EQUIPMENT COMPLIANT WITH GOVERNMENT REGULATION

Fishing net for Muziri/Onangnang	7 long-lines	UGX 1,295,000
Corks for the long-lines	600 corks	UGX 600,000
Ropes	8 pieces	UGX 216,000
Stones	16 pieces	UGX 16,000
Nylon sewing rope	4 pieces	UGX 28,000
Pay Labour for sewing	1 person	UGX 8,000
Pressure Lamps	4 pieces	UGX 520,000
Kitambi	4*2 lamps	UGX 8,000
Fuel for the engine	20 litres	UGX 120,000
Rent for engine	1 pieces	UGX 400,000 per month

To overcome challenges, as women we are organised in groups.⁶ When I am not fishing we are together at the landing site smoking, sun-drying and salting the fish or lastly, taking it to market, striving to make fishing a more sustainable practice⁷

↓ Kwer Kabacayi women group's fish smoking kiln



6 ↓

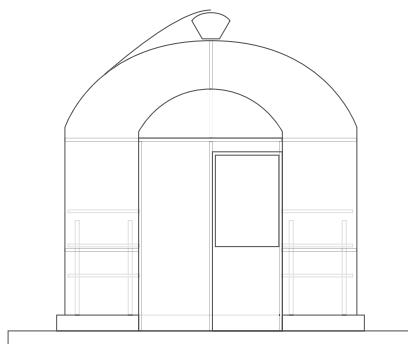
At Dei's landing site you can meet the Kwer Kabacayi women's group and the Cwara Nguta women's group. I am one of the 28 members of the Kwer Kabacayi group; before the fishing halt, concurrent with the COVID-19 pandemic prevention measures and government enforcement in the fisheries sector, we were 50.

7 ↓

As a women's group, we are adopting practices and acquiring equipment to make fishing more sustainable. Our group installed a fishing smoke kiln (thanks to the support of the NARO project); we need 5,000 bricks, 27 bags of cement, 10 reinforcement bars, 8 stirrups, 4 kg of binding wires; 48 pieces of iron sheets; 65 pieces of timber,

• KWER KABACAYI

↓ Cwara Nguta women group solar fish drying machine



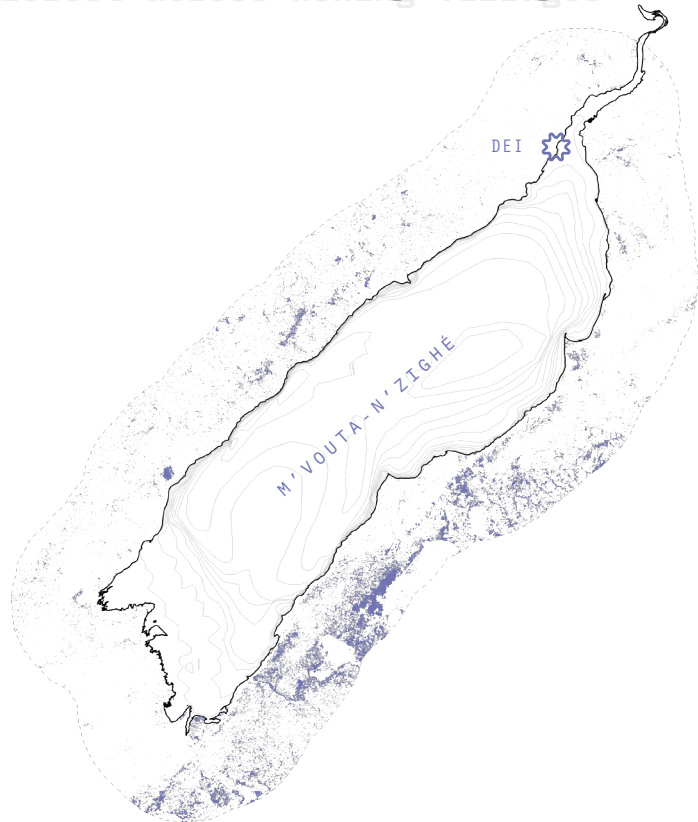
6 trips of sand and 2 doors to complete the structure. Actually, this machine is optimal for bigger fish than the *Mukene*. Larger fish require a bigger boat and new fishing nets. It would take UGX 30,000,000 (USD 8,000) to achieve this. The Cwara Nguta Women's group instead built a solar fish drying machine (with the support of NUTRIFISH).

• CWARA NGUTA



↑ Traditional fish
smoking earthen kiln

We know fishing practices must take place through careful management of forest resources; for instance, wood collection for fish smoking has cleared several acres of forest across fishing villages

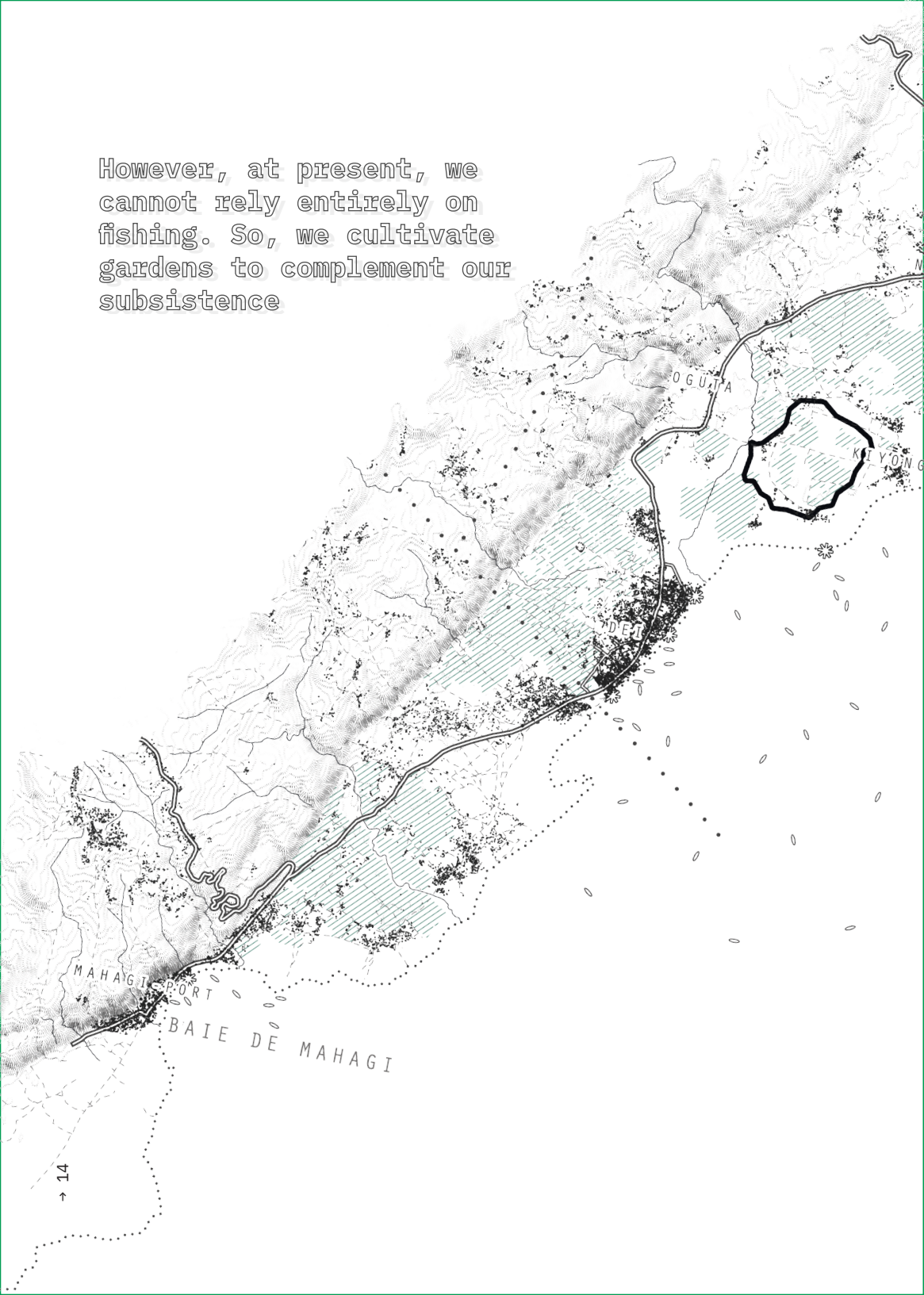


↑ Blue patches in the map, prove the gross forest cover loss on the shores of M'vouta-N'zighé Lake over the period 2000-2021 (source: Hansen/UMD/Google/USGS/NASA). Reasons include a combination of anthropogenic disturbances and

natural or climatic cycles, but in the fishing villages, within 1 km distance from shoreline, it remains among the leading causes of deforestation. In the village of Dei, almost one in two people state that fish smoking is the reason for cutting down a tree.

Traditional earthen kilns have enabled the Alur to preserve their catch for generations, being hugely important in ensuring our food security; the new kiln, when completed, will allow us to continue this practice without impacting forestry.

However, at present, we cannot rely entirely on fishing. So, we cultivate gardens to complement our subsistence





↑ The map shows the areas where our gardens are clustered. Unfortunately, the ancient agroecological and agroforestry model has disappeared, and with difficulty, attempts are being made to reconstruct it.

Biennial crops and perennial crops are largely the prevailing land use, but we are aware that this model of agricultural development has contributed to altering the climate cycle. We have paid a high price for this choice.

We women are above all, those engaged in agricultural work.⁸ We are the seed custodians.⁹

8 ↓

Seasonally we plant twice, between March-April and August-September, i.e. at the beginning of the rainy seasons (the first rainy season stretches from March to June, the second from mid-August to the end of November). Harvest is in June-July and November-December. Only two-fifths of us manage to rely only on their stored seeds (in particular, cassava, beans, grand nuts and soybeans seeds are preserved). We need seeds. The government supports us sporadically at the district level: during the period 2019-2022, on average, a farmer received 6-6.5 kg of maize and planted it on just over half (0.63-0.65) of an acre; each cassava cuttings beneficiary received 7 bags of cuttings and

planted it on average on just about an acre; each bean farmer received 13 kgs of seeds and planted it on average on less than half (0.44) of an acre. The ratio of females to males in the seed distribution was about 1:1. We chronically suffer with seed deficit despite public support, so we need the support of programmes of local and regional organisations. We complain about timing errors by the National Agriculture Advisory Services NAADS - OCW Programme with the supply of seeds, which are brought here when the planting season is over and we enter the dry season. We are organising ourselves into women's groups to cope; in Dei you can meet the Chan Ber Ku Fur women's group.

9 ↓

We store the maize cobs over the kitchen fire. The smoke from cooking preserves the seeds, which we store in our house for the next season's sowing. So do the other seeds. We do not have a proper seed bank, the traditional ones have been destroyed due to lack of maintenance or disastrous climatic events, such as floods. The introduction of varieties we are not familiar with and from outside makes our role difficult. Some cassava varieties introduced from outside cannot be preserved; we prefer local varieties. We have had seeds of cotton and tomato varieties that do not grow here. We call for increased vigilance in the control of varieties when they are introduced from outside.

• CHAN BER KU FUR

CASSAVA ↓

SOYBEAN ↓

MAIZE ↓



GROUNDNUTS ↑

SIM SIM ↑
SESAME

SWEET POTATO ↓

BEANS ↓

PUMPKINS ↓



We women are the custodians of ecological knowledge and agroforestry practices, which we are committed to preserve and transmit

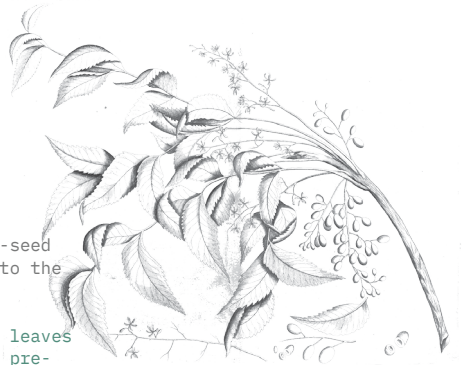
NEEM

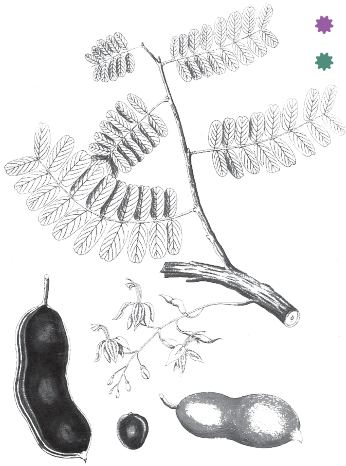
Azadirachta indica



Windbreak, provides fodder (leaves, oil-seed cake) for the animals, provides forage to the bees, promotes soil conservation.

Fruits are eaten fresh or cooked, young leaves and flowers can be cooked and eaten as a pre-meal, sap obtained from the branches and roots is fermented and drunk. A non-drying oil extracted from the seed is used in hair dressings. The oil can also be used as a fuel in lamps. The leaf teas, oil extracted from the seeds, twigs, bark, neem oil, neem leaf paste are used in medicine. The wood is a source of timber. The main stem is used to make poles for construction or fencing because the wood is termite resistant



CWAA*Tamarindus indica*

Windbreak, provides fodder for the animals, can be used as a mulch, nitrogen fixation, shade.

Green and tender seed pods are used as a seasoning and also to make juices and paste. Immature pods can be eaten fresh mixed with spices, or added whole to soups and sauces. Mature pods contain a sticky paste which can be eaten raw. The pulp mixed with water makes a pleasant drink. Roasted seeds can be used as a coffee substitute. Seedlings can be used as a vegetable. Flowers can be eaten raw in salads or cooked. Bark, leaves, flowers, flower buds, fruit, and seeds are used in medicine. The wood is used for general carpentry, sugar mills, wheels, hubs, wooden utensils, agricultural tools, mortars, boat planks. Provides good firewood. The leaves yield a red dye which is used to give a yellow tint to clothe previously dyed with indigo.

OGAL*Piliostigma thonningii*

Suitable for intercropping with crops. It provides good shade and serves as shelterbelt in homesteads when in full foliage. It is used in live fences around fields and as a live support for vines of weaker plants. Provides forage to the bees.

The fruit is eaten as a snack or as an emergency food, especially by children and herdsmen. In times of scarcity the fruits are ground and boiled into porridge or made into drinks. Fibres extracted from the bark are widely used for making string, rope and cloth. Root fibres are made into rope as well. The leaves are used for wrapping food, and twigs and roots serve as toothbrushes. Roots, barks, leaf are used in medicine. We chew the root-bark to redden lips. The unripe fruits are used as a soap substitute, and the ash of ripe fruits is also used in soap making.

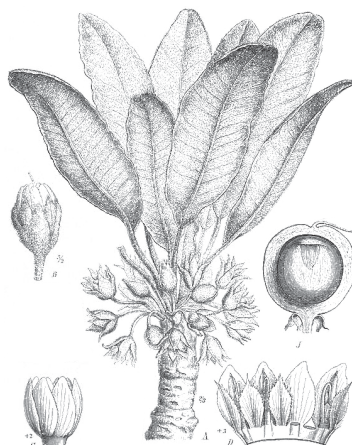
YAAU or YAO

Butyrospermum paradoxum



Significant role in soil and water conservation and environmental protection. Seed husks are an excellent mulch and fertiliser. Furthermore, they can remove heavy metal ions in aqueous solutions. Cooperative plants with cereal crops.

The kernel of the seed contains a vegetable fat known as shea butter. Refined fat is marketed as margarine and baking fat. The reddish latex which exudes from deep cuts in the bark is used as a chewing gum. The flowers are edible and sometimes made into fritters. Suitable for making candles. As waterproofing material is used as daubing for earthen walls, doors and windows. Waste water from shea butter production has pesticidal properties. Only unproductive and unhealthy trees are cut for timber. Leaves, ground roots, barks are used in medicine.



KALARUFU

Grevillea robusta



Windbreak, provides fodder for the animals, shade, soil erosion control, soil fertility improvement through mulch/ leaves.

Wood is used for paneling, joinery, cabinet making. Provide poles. Provide firewood and charcoal.





ACOGA

Carissa edulis

Suitable for planting as a protective hedge.

Fruits are edible and can be fermented to make a refreshing pink wine or left longer to make vinegar. When planted as a hedge along a fence will be so thick that no stock or wildlife will be able to penetrate it. Roots are used in medicine.



OSIGA

Solanum nigrum

Effective in removing chemical pollutants and hydrocarbons from the soil and in detoxification.

Fruits are eaten cooked or used in preserves and jams. Young leaves and new shoots are eaten raw or cooked as a potherb or added to soups. Leaves, stems and roots are used in medicine.

OLEMO

Ximentia americana



Suitable for planting as a protective hedge.

The fruits, as well as being pleasant to eat raw, can be used to make juice. Kernel oil is used as a vegetable butter and as a ghee substitute. Young leaves are edible after thorough cooking. Firewood and charcoal are the main uses of the wood. Heartwood contains an essential oil used for fumigation. The flowers have an essential oil. Leaves, barks, roots, fruits and twigs are used in medicine.



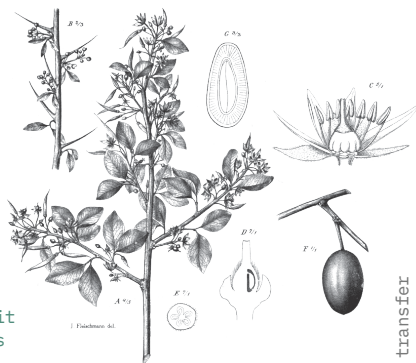
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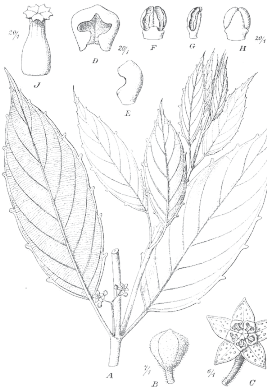
Balanites aegyptiaca



Planted in shelterbelts, shade.

The fleshy pulp of both unripe and ripe fruit is edible and eaten dried or fresh. Flowers are sucked to obtain nectar. A strong fibre is obtained from the bark. The wood is hard, durable, worked easily and made into yokes, wooden spoons, pestles, mortars, handles, stools and combs. A greenish-yellow to orange-red resin is produced from the stems. It is sucked and chewed when fresh. The kernels produce edible oil used for cooking. Roots are used in medicine.





Maesopsis Eminii



Used for reforestation purposes, leaves are used as fodder, shade.

The wood is used for purposes such as light construction, boxes and crates, millwork, plywood or core stock. Fast maturation period comparable with introduced coniferous trees and produces comparatively more wood per unit area. Roots and barks are used in medicine.



Markacania lutea



Shade, soil erosion control, soil fertility improvement through nitrogen-fixing, soil fertility improvement through mulch/ leaves.

The wood is moderately durable, being moderately resistant to termites. It is held to be an excellent timber for interior carpentry and cabinetry. Roots are used in medicine.

Albizia coriaria



Shade, soil fertility improvement through nitrogen-fixing, soil fertility improvement through mulch/ leaves, bee forage.

The wood is used for construction. It is also suitable for carpentry, musical instruments, boxes and crates. Bark, leaves, and roots are used in medicine.



MBENI

Eucalyptus grandis



Shade, riverbank stabilization, windbreak.

The wood is a source of timber which can be used for boat building. The firewood is used for domestic purposes and for curing tobacco. Ground branch tips and leaves are used in medicine.



Pinus caribaea



Shade, soil erosion control, windbreak.

Vanillin flavouring is obtained as a by-product of other resins that are released from the pulpwood. The sapwood can be tapped for oleoresin. Provides timber. Leaf oil, resin and barks are used in medicine.

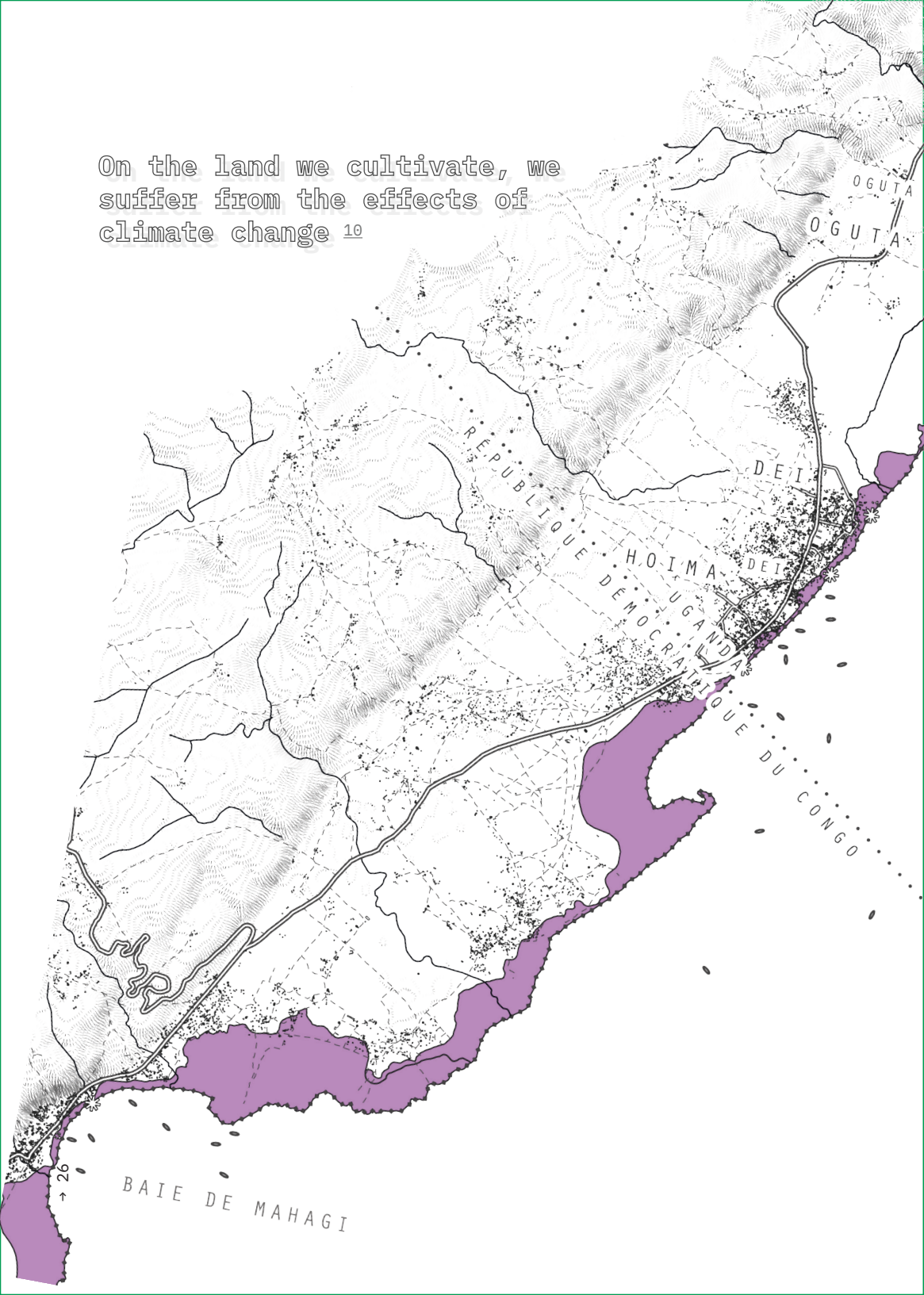
Mangifera indica

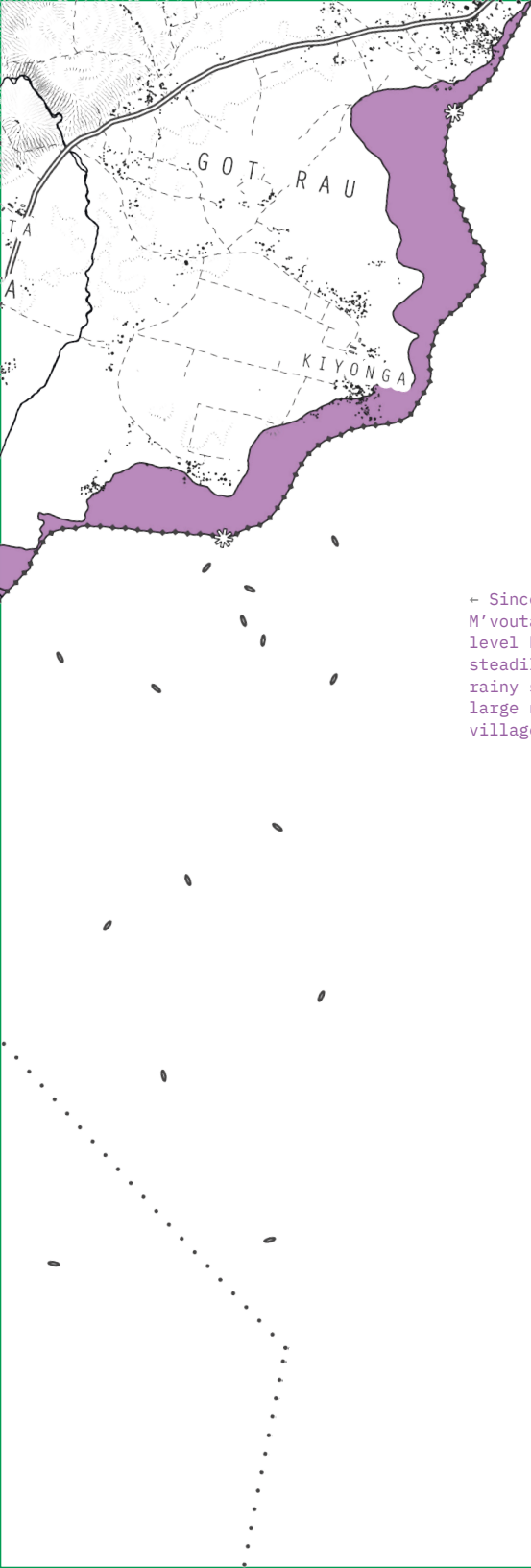


Windbreak, shade.

Fruits are eaten raw, juiced or prepared in chutneys, jams, pickles. Seeds are used in the preparation of pudding. Young leaves can be cooked as a vegetable. The bark and the leaves are the source of a yellowish-brown dye. The flowers are used to repel mosquitoes. The slender branches are used as toothbrushes to treat toothache. The wood is used for indoor construction, furniture, carpentry, boxes, crates and boat building. Leaves, seeds, barks, roots, flowers and fruit are used in medicine.

On the land we cultivate, we
suffer from the effects of
climate change ¹⁰





← Since 2016, Lake M'vouta-N'zighé's water level has been rising steadily, and during the rainy season it floods a large number of fishing villages.

The map shows the areas that have been flooded by water over the past five years (2018-2023). Lack of natural shore defences causes the lake to easily flood such flat areas.

10 ↓

Our seeds fail even if the soils are fertile because we can no longer count with the frequency and intensity of rainfall. Periods of prolonged drought are affecting planting and crop yields. Severe drought, especially in the first season of 2019, affected farmers who planted oranges and mangoes, because it did not allow seedlings to establish properly in the field and they eventually dried out.

Land is scarce; customary and collective land has almost disappeared.¹¹ We do not own much land, and as women our land rights are even less respected through an oppressive scheme that reproduces itself in daily life ¹²

11 ↓

We first experienced the forests becoming private during the 20th century. Then the same forests were cleared for extensive and then intensive agricultural use. While agriculture initially fed the growing population of the Dei sub-county and the goods were traded or sold at the local market, over time the profit rationale driven by the lucrative returns of some cash crops brought an end to agroforestry and drastically reduced the area of land available for subsistence farming, which is now critical to the livelihood of many households (on average, people need one acre of land per household) given the challenges posed by the fishing industry.

12 ↓

Land - its access, control and ownership - lies at the heart of power relationships within Uganda. The struggle for land is deeply intertwined with the struggle for women's rights. Women's access to and control over resources and economic decision making is fundamental to the achievement of our rights. Despite some progress, inequality between women and men in ownership and control of land remains stark. Cultural prohibitions against women's ownership of land are often more powerful than statutory laws that allow women to own land. These cultural norms may determine which rights to land a woman can exercise freely. Effective statutory

laws protecting land, inheritance and property rights of women including the widowed, divorced, separated or those in cohabitation are critically missing. Moreover, violence is breeding in Dei, particularly gender-based violence. There were 10 murder cases recorded between 2021 and 2022, including gender-based violence involving young people, mainly due to relationship break-ups or theft offences. Daily life hinges on violations, such as those at the landing site, where fish happened to be sold in return for transactional sex.

As community and women's groups, we are working to restore the forests and the waters to its ecological functionality,¹³ and reintroduce agroforestry practices¹⁴

¹³ ↓

We realise we do not have sufficient forest resources to heat ourselves, build our homes and feed our households. In our parish alone live 628 households; never have so many people inhabited this land, never have there been so few forest resources available. People cut trees for commercial reasons, getting charcoal and firewood. Two-thirds of people report that, in the absence of other sources of income, they sell forest products, giving up their use for household needs.

¹⁴ ↓

We transplant the seedlings from the nursery beds, planting the seedlings, watering the seedlings, and preparing tea for all the people involved. We use our knowledge in harvesting and processing the different parts of the plant, which become food and medicine. Women are also elected to sit on and therefore make decisions in the market committee of forestry groups. Two nursery operators also live and work in the sub-county and help with operations. Seeds collection,

banking, and storage, nursery and distribution of seedlings, is an initiative by the organisation *Environmental Defenders*, as part of their actions towards environmental conservation.

We don't need solutions, we have solutions; we pretend not to be forced into migration because we can't continue to keep our livelihoods and ancestrality. We need support, solidarity, reciprocity, liberation



Thanks to the *Global Alliance for Green and Gender Action* who, through financial support from *Mama Cash* and *The David & Lucile Packard Foundation* enabled the women of Dei sub-county to amplify their voices. Thanks to the careful work of the *Environmental Defenders* team and the scientific coordination of *Pamella Lakidi Achan* and *Alessandro Musetta*

